

Inventor(s): KOJIMA et al.

Appln. No.: 09

658,501

Series Code ↑

Serial No. ↑

Filed: September 8, 2000

Hon. Commissioner of Patents  
Washington, D.C. 20231

Sir:

**REPLY/AMENDMENT/LETTER**

Group Art Unit

1763

Examiner:

K. MOORE

Atty. Dkt.

P

273851

EL00018CDC

M#

Client Ref

Appln. Title:

SEMICONDUCTOR MANUFACTURING  
SYSTEM HAVING A VAPORIZER  
WHICH EFFICIENTLY VAPORIZES A  
LIQUID MATERIAL

Date: July 2, 2002

This is a reply/amendment/letter in the above-identified application and includes the herewith attachment of same date and subject which is incorporated herein by reference and the signature below is treated as the signature to the attachment in absence of a signature thereto.

**FEE REQUIREMENTS FOR CLAIMS AS AMENDED**

## 1. Small Entity claim

A. ☒ NOT madeB. ☐ WithdrawnC. ☐ made herewithD. ☐ made previously

For B &amp; C

See **Required****Separate Paper**

(Pat-256)

Claims remaining after amendment	Highest number previously paid for	Present Extra	Large/Small Entity	Additional Fee	Fee Code Lg/Sm
2. Total Effective Claims	12	**minus 20 0	x \$18/\$9 =	+ \$0	103/203
3. Independent Claims	2	***minus 3 0	x \$84/\$42 =	+ \$0	102/202
4. If amendment enters proper multiple dependent claim(s) into this application for first time (leave blank if this is a reissue application) .....	add	+ \$280/\$140 =	+ \$0	104/204	
5. Original due Date: July 2, 2002	<input type="checkbox"/> NONE				
6. Petition is hereby made to extend the original due date to cover the date this response is filed for which the requisite fee is attached	(1 mo) \$110/\$55 = (2 mos) \$400/\$200 = (3 mos) \$920/\$460 = (4 mos) \$1,440/\$720 = (5 mos) \$1,960/\$980 =	+ \$0			115/215 116/216 117/217 118/218 128/228
7. Enter any previous extension fee paid since above original due date and subtract	- \$0				
8.	Extension Fee	+ \$0			
9. If <b>Terminal Disclaimer</b> attached, add Rule 20(d) official fee .....	+ \$110/\$55	+ \$0			148/248
10. If IDS attached requires Official Fee under Rule 97 (c), ..... add	+ \$180	+ \$0			126
or if Rule 97(d) Request ..... add	+ \$180				126
11. After-Final Request Fee per rules 129(a) and 17(r) .....	+ \$740/370	+ \$0			146/246
12. No. of additional inventions for examination per Rule 129(b) .....	x \$740/370 ea	+ \$0			149/249
13. Request for Continued Examination (RCE) .....	+ \$740/370	+ \$0			1179/1279
14. Petition fee for .....		+ \$0			

15.

TOTAL FEE = \$0

16. \*If the entry in this space is less than entry in next space, the "Present Extra" result is "0".

17. \*\*If the "Highest number previously paid for" in this space is less than 20, write "20" in this space.

18. \*\*\*If the "Highest number previously paid for" in this space is less than 3, write "3" in this space.

**PLEASE CHARGE  
OUR DEP. ACCT**

Our Deposit Account No. 03-3975)

(Our Order No. 40258

273851

C#

M#

**CHARGE STATEMENT:** The Commissioner is hereby authorized to charge any fee specifically authorized hereafter, or any missing or insufficient fee(s) filed, or asserted to be filed, or which should have been filed herewith or concerning any paper filed hereafter, and which may be required under Rules 16-18 (missing or insufficiencies only) now or hereafter relative to this application and the resulting Official Document under Rule 20, or credit any overpayment, to our Accounting/Order Nos. shown above, for which purpose a duplicate copy of this sheet is attached.

This CHARGE STATEMENT does not authorize charge of the issue fee until/unless an issue fee transmittal sheet is filed.

Query: Is appeal deadline now? If so, file Notice of Appeals separately.

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Intellectual Property Group  
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Atty/Sec: DSL/TPT/smm

NOTE: File this cover sheet in duplicate with PTO receipt (PAT-103A) and attachments



#9/A  
7/11/02  
Mo

THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re PATENT APPLICATION OF

Confirmation No.: 3068

KOJIMA et al.

Group Art Unit: 1763

Appln. No.: 09/658,501

Examiner: K. MOORE

Filed: September 8, 2000

Title: SEMICONDUCTOR MANUFACTURING SYSTEM HAVING A VAPORIZER  
WHICH EFFICIENTLY VAPORIZES A LIQUID MATERIAL

July 2, 2002

\* \* \* \* \*

AMENDMENT UNDER 37 C.F.R. § 1.111

RECEIVED  
JUL 08 2002  
TC 1700

Hon. Commissioner of Patents  
Washington, D.C. 20231

Sir:

In response to the Office Action dated April 2, 2002, please amend the above-identified application as follows:

IN THE CLAIMS:

Please enter the following amended claim:

1. (Amended) A vaporizer which vaporizes a liquid material under a depressurized atmosphere, the vaporizer comprising:  
a liquid storing chamber temporarily storing the liquid material therein;  
a vaporizing chamber set in the depressurized atmosphere;  
a small aperture connecting between the liquid storing chamber and the vaporizing chamber so as to supply the liquid material to the vaporizing chamber;  
a valve body located in the liquid storing chamber so as to open and close an inlet port of the liquid storing chamber on a side of the liquid storing chamber; and  
an actuator controlling a degree of opening of the valve body.

7. (Amended) The vaporizer as claimed in claim 1, wherein the vaporizing chamber has a conical shape so that a cross section of the vaporizing chamber increases as a distance from the small aperture increases.